Documentation Sheet

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No. of Copies 8

Title *A Preliminary Study on the Electromagnetic Characteristics of Frequency Selective Surfaces*

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Division ALD

NAL Project No: A-8-602

Document No. PD AL 0704

Date of issue April 2007

Contents 20 Pages 13 Figures x Tables 6 References

External Participation Nil

Sponsor In-house

Approval Head, ALD

Remarks x

Keywords Frequency selective surfaces, grid elements, EM characteristics

Abstract

Frequency selective surfaces (FSS) have potential applications in the aerospace engineering. This report deals with the preliminary study on the electromagnetic characteristics of grid elements used for FSS arrays in view of aerospace applications. Basic features of various grid elements used for FSS are discussed. Simulation studies are carried out for the selected element types such as Jerusalem cross, single square loop and double square loop. The EM characteristics of the arrays of these elements are computed based on the equivalent circuit method. The computed results show excellent match with those of reference.